

In the Claims:

1-25. (canceled)

26. (currently amended) An apparatus, comprising:

a correction circuit coupled to receive a first symbol transmitted from a first antenna at a one time and a complement of a conjugate of a second symbol transmitted from a second antenna at the one time, and coupled to receive the second symbol transmitted from the first antenna at another time and a conjugate of the first symbol transmitted from the second antenna at the another time, ~~and coupled to receive a first estimate signal determined from a one of the first symbol and the second symbol, and a second estimate signal determined from one of the complement of a conjugate of a second symbol and the conjugate of the first symbol,~~ the correction circuit producing a first symbol estimate in response to the first symbol and the conjugate of the first symbol, and a second symbol estimate in response to the second symbol and the complement of the conjugate of the second symbol; and

a combining circuit coupled to receive a plurality of symbol estimates including the first and the second symbol estimates, the plurality of symbol estimates corresponding to a respective plurality of signal paths, the combining circuit producing a first symbol signal and a second symbol signal in response to the plurality of symbol estimates.

27-28. (cancelled)

29. (previously presented) An apparatus as in claim 28, wherein the correction circuit produces the first symbol estimate and the second symbol estimate in response to the first symbol, the conjugate of the first symbol, the second symbol, the complement of the conjugate of the second symbol, the first estimate signal, and the second estimate signal.

30. (previously presented) An apparatus as in claim 26, wherein the correction circuit receives the first symbol and the complement of the conjugate of the second first symbol via a common receive antenna.

31. (previously presented) An apparatus as in claim 26, wherein the correction circuit receives the first symbol and the complement of the conjugate of the second first symbol over a common frequency band.

32. (previously presented) An apparatus as in claim 26, wherein the plurality of symbol estimates corresponds to one of the first and second symbols.

33. (previously presented) An apparatus as in claim 26, wherein the combining circuit is a rake combiner.

34. (previously presented) An apparatus as in claim 26, wherein said first antenna and said second antenna are transmitting antennas.

35. (previously presented) An apparatus as in claim 26, wherein said correction circuit is coupled to an antenna that receives said first symbol

transmitted from said first antenna and said complement of said conjugate of said second symbol transmitted from said second antenna.

36. (currently amended) A method, comprising the steps of:

receiving a first symbol transmitted from a first antenna at a one time and a complement of a conjugate of a second symbol transmitted from a second antenna at the one time;

receiving the second symbol transmitted from the first antenna a another time and a conjugate of the first symbol transmitted from the second antenna at the another time;

~~—producing a first estimate signal determined from one of the first symbol and the second symbol;~~

~~—producing a second estimate signal determined from one of the complement of a conjugate of a second symbol and the conjugate of the first symbol;~~

producing a first symbol estimate in response to the first symbol and the conjugate of the first symbol;

producing a second symbol estimate in response to the second symbol and the complement of the conjugate of the second symbol;

receiving a plurality of symbol estimates including the first symbol estimate and the second symbol estimate, the plurality of symbol estimates corresponding to a respective plurality of signal paths; and

producing a first symbol signal and a second symbol signal in response to the plurality of symbol estimates.

37-39. (Cancelled)

40. (previously presented) The method of claim 36, further including receiving the first symbol and the complement of the conjugate of the second symbol over a common channel.

41. (previously presented) The method of claim 36, wherein the first symbol and the complement of the conjugate of the second symbol are received over a common frequency band.

42. (previously presented) The method of claim 36, wherein the plurality of symbol estimates corresponds to one of the first and second symbols.

43. (currently amended) The method of claim 36, wherein the steps of receiving a first symbol transmitted from a first antenna at a one time and a complement of the conjugate of a second symbol transmitted from a second antenna at the one time, ~~and said~~

receiving the second symbol transmitted from the first antenna at another time and a conjugate of the first symbol transmitted from the second antenna at the another time,

producing a first symbol estimate in response to the first symbol and the conjugate of the first symbol, and

producing a second symbol estimate in response to the second symbol and the complement of the conjugate of the second symbol occur in a correction circuit.

44-45. (canceled)